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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,936	03/15/2004	Takashi Ouchi	T0509.70017US00	1276

7590 06/07/2006

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EXAMINER
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HUG, ERIC J

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 06/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/800,936	<b>Applicant(s)</b> OUCHI ET AL.	
	<b>Examiner</b> Eric Hug	<b>Art Unit</b> 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 March 2004 and 14 April 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 9 is/are rejected.
- 7) ☒ Claim(s) 7, 8 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by

Barnewall (US 4,931,010)

Barnewall discloses a papermaking press fabric (felt) comprising one or more hydrophilic and/or hydrophobic resin layers applied to the surface of the fabric as a foam coating. A hydrophilic polyurethane can be used. Polyester is also disclosed. Combinations of polymers can be used. See particularly column 2, lines 17 and 28-31, and also see Example 2. Table 1 shows that the added resin layer(s) falls within 0.5-10% by weight of the felt. Column 2, lines 11-16 discloses the type of press fabrics which can be treated.

Claims 1, 6, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Tate (US 3,573,089).

Tate discloses papermaking fabrics, including felts, having a hydrophilic coating on the surface. The coating comprises at least one water soluble organic compound containing at least two hydrophilic groups of which at least one of which contains an active hydrogen atom, and a condensing agent capable of reacting with the active hydrogen of the hydrophilic groups. The condensing agent permits bonding of the hydrophilic substance to the surface of the fabric. A

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synthetic polymeric resin may additionally be applied to the surface of the fabric before applying the hydrophilic coating. The resin reacts with the condensing agent, thereby providing the hydrophilic coating with more durability. In this case, the synthetic resin is equivalently an anchoring agent. The hydrophilic substance may include a urethane component. See Example 1 (column 6) where a urethane diisocyanate is used in the formulation as a condensing agent. The synthetic resins include polyester (column 5, lines 8-43).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tate in view of Hisaki et al (US 4,464,431).

In the hydrophilic treatment of the papermaking fabric disclosed by Tate above, the hydrophilic substance is not provided through polymerization of a blocked hydrophilic urethane prepolymer. Hisaki discloses treating a woven or non-woven fabric with stable aqueous solution of a hydrophilic urethane prepolymer with its free isocyanate group blocked and then dissociating the blocking agent by heating, thereby regenerating the active isocyanate groups of the urethane prepolymer so that the resulting polyurethane is strongly adhered to the fabric. Ethylene oxide is disclosed as being one of the prepolymer components. Such hydrophilic treatment is disclosed as being suitable for non-woven and woven fabrics made of synthetic

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thermoplastic fibers such as polyester and polyamide, materials which are used in the papermaking fabrics of Tate. The ethylene oxide (oxyethylene) content is 10-40% of the prepolymer. See column 3, lines 45-56. At the time of the invention, it would have been obvious to one skilled in the art to utilize the hydrophilic treatment of Hisaki for rendering the fabric of Tate hydrophilic. Such a coating would be more durable and would be more strongly adhered to the fabric than that disclosed by Tate, and could be applied without an additional synthetic resin coating.

***Allowable Subject Matter***

Claims 7, 8, and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The claims are allowable for providing the N-methylol acrylamide as an anchoring agent.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Eklund (US 5,298,124) discloses a transfer belt comprising a polyurethane layer rendered hydrophilic by addition of filler material.

Fagerholm (US 5,829,488) discloses a dryer fabric comprising a polyurethane based hydrophilic substance.

Hagfors (US 6,605,188) discloses a transfer belt comprising a polyurethane mixed with hydrophilic fibers.

Crook (US 6,712,940) discloses a papermaking belt comprising a polyurethane thermoplastic layer.

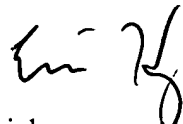
Murakami (US 2004/0040612) discloses a papermaking fabric having a coating prepared by blending a two-liquid curing type urethane modified epoxy resin with a prepolymer of phenolsulfonic acid.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Hug whose telephone number is 571 272-1192.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
jeh